

DETAILED ACTION

Examiner Comments

1. Examiner notes that the response to the election requirement was received. The claims drawn to the elected species of figures 2 and 3 as stated by the applicant were 1-4 and 6-7. However, examiner notes that claims 6-7 draw to Group III, figures 5-9. Claims 6 and 7 both recite the limitation "centrifugal elements" which the spec defines as the balls (27) located in figures 5-9. Claims 6 and 7 are withdrawn from consideration. Claims 1-4 are examined on the merits in this application.

Oath/Declaration

2. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:
It does not state that the person making the oath or declaration acknowledges the duty to disclose to the Office all information known to the person to be **material to patentability** as defined in 37 CFR 1.56.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tietjens (US Patent 4,192,065 as cited in IDS) in view of Uchiyama et al. (US Patent 5,390,416).

7. With respect to claim 1, Tietjens discloses a shaving apparatus with at least one cutting unit, said cutting unit comprising an outer cutter (1) and an inner cutter (4) that can be driven into rotation with respect to the former, said inner cutter being provided with cutting elements (5) with cutting edges, while said outer cutter is provided with hair trap openings (3) bounded by cutting edges (2) for cooperating with the cutting edges of

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the cutters for the cutting of hairs, wherein during cutting of a hair a cutting force (F_c) is exerted by the hair on the inner cutter, and a plane through the totality of cutting edges defines a cutting plane (the inner blade is spun to create this force), said shaving apparatus being further provided with a drive device having a drive shaft (8) for driving the inner cutter, which drive device during cutting of a hair exerts a drive force (F_d) on the inner cutter (rotates the cutter), which force is substantially parallel to the direction of the cutting force (F_c), while the drive shaft exerts a pre-stress force in the direction of the outer cutter (spring force 6), characterized in that: the drive device comprises only one coupling member (11' of figure 3) that can be driven into rotation and that is provided with at least one driving surface (17'); the drive shaft is axially supported on the outer cutter by means of the coupling member; and the inner cutter is provided with at least one driven surface (14') cooperating with the driving surface for exerting the driving force on the cutter (5), the direction of said driving force being substantially perpendicular to the driving surface and the driven surface (see force N in figure 3).

Tietjens does not disclose the cutting unit being pivotally and resiliently supplied in a casing. Examiner notes that this is old and well known in the art, but the patent to Tietjens just does not disclose said features. Uchiyama et al. discloses a rotary shaver comprising three rotary cutting units (12) supplied in a case (10 in figure 3). The cutting units are movable in the axial direction as well as slightly depressible (column 3 lines 3-10). All the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one

of ordinary skill in the art at the time of the invention. Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to supply the cutting unit of Tietjen in a casing and in the slightly movable manner as taught by Uchiyama et al.

8. With respect to claim 2, Tietjens discloses a shaving apparatus as claimed in claim 1, characterized in that means are present for obtaining a small contact pressure between the cutters. Force N, shown in figure 3, drives the cutter up towards the shear plate (3) during operation.

9. With respect to claim 3, Tietjens discloses a shaving apparatus as claimed in claim 1, characterized in that the driving surface and the driven surface cooperating therewith have mutually corresponding helical shapes.

10. With respect to claim 4, Tietjens discloses a shaving apparatus as claimed in claim 2 wherein the inner cutter has a carrier (4) for the cutting elements, which carrier is provided with the driven surfaces (14'); a coupling member (11') is present which is coupled to said carrier (as shown in figure 3), the carrier being movable in axial direction with respect to the coupling member, while said coupling member can be coupled to the drive shaft and is provided with driving surfaces; and the means for obtaining a small contact pressure between the cutters are present between the carrier and the coupling member (the vertical portion of force N).

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The art of Tietjens, Barish, and van Erp et al. are noted as disclosing similar methods of maintaining inner blade pressure on the outer cutter as the applicant's.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph De Frank whose telephone number is (571) 270-3512. The examiner can normally be reached on Monday - Thursday; 8am-5pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrence Till can be reached on (571) 272-1280. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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